UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P. D. Bey 1450

P O Box 1450 Alexandria, Virgima 22313-1450

# NOTICE OF ALLOWANCE AND FEE(S) DUE

45453 7590 0126/2010 BUCHANAN INGERSOLL & ROONEY PC (ARCHER DANIELS MIDLAND COMPANY) 301 GRANT STREET. 20TH FLOOR

PITTSBURGH PA 15219

EXAMINER

KIM, ALEXANDER D

ART UNIT PAPER NUMBER

DATE MAILED: 01/26/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,695	02/04/2004	Paul D. Hanke	040049	4373

TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING A TRUNCATED ORF2 FROM CORYNEBACTERIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/26/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further c indicated unless correcter maintenance fee notificati	form should be used for correspondence includired d below or directed oth ions.	or trang the	nsmitting the ISSU Patent, advance on in Block 1, by (a					hould be completed when correspondence address a trate "FEE ADDRESS" fo
CURRENT CORRESPONDED	NCE ADDRESS (Note: Use Bi	ock I for	any change of address)	pap	ers. Each additiona	il paper	g can only be used for ficate cannot be used for such as an assignmental filing or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, mus
BUCHANAN II (ARCHER DANI 301 GRANT STF	7590 01/26 NGERSOLL & F IELS MIDLAND O REET, 20TH FLOO	COM		T be	Cer	tificat	of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
PITTSBURGH, F	PA 15219							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	ŧ.	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/771,695	02/04/2004			Paul D. Hanke			040049	4373
TITLE OF INVENTION:								
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	04/26/2010
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	]			
KIM, ALEXA	ANDER D		1656	536-023100				
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN	ondence address (or Cha /122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA sess an assignee is ident in 37 CFR 3.11. Comp	nge of " Indic ed. Us	Correspondence ation form e of a Customer BE PRINTED ON		o 3 registered pater vely, le firm (having as a agent) and the nam ymeys or agents. If printed. pe) atent. If an assign assignment.	n memb es of u no nan	er a 2	ocument has been filed for
4a. The following fee(s) as	re submitted:		41	inted on the patent):				oup entity Government
Publication Fee (No small entity discount permitted)			Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
Advance Order - #	of Copies			overpayment, to Dep	y authorized to char osit Account Numb	rge the	required fee(s), any de (enclose a	ficiency, or credit any n extra copy of this form).
	SMALL ENTITY state	ıs. See	37 CFR 1.27.	b. Applicant is no lor				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeords of the United Sta	uired) tes Pat	will not be accepted ent and Trademark	d from anyone other than Office.	the applicant; a regi	istered	attorney or agent; or th	ne assignee or other party ir
Authorized Signature _					Date			
Typed or printed name					Registration N			
This collection of informa an application. Confidenti submitting the completed this form and/or suggestion Box 1450, Alexandria, Vi Alexandria, Virginia 2231	tion is required by 37 C iality is governed by 35 application form to the ons for reducing this bur rginia 22313-1450. DC .3-1450.	FR 1.3 U.S.C USPT den, sl NOT	811. The informatic . 122 and 37 CFR [O. Time will vary hould be sent to the SEND FEES OR (	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by t timated to take 12 i vidual case. Any co er, U.S. Patent and O THIS ADDRESS	the pub minute ommen Trader S. SEN	lic which is to file (and is to complete, including its on the amount of the nark Office, U.S. Dep D TO: Commissioner	I by the USPTO to process ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

## NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 01/26/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/771,695	02/04/2004	Paul D. Hanke	040049	4373		
45453 75	90 01/26/2010		EXAMINER			
BUCHANAN IN	GERSOLL & ROO	KIM, ALEXANDER D				
	ELS MIDLAND COM	ART UNIT	PAPER NUMBER			
301 GRANT STRE PITTSBURGH, PA	EET, 20TH FLOOR \ 15219	1656				

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 276 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 276 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

## Application No. Applicant(s) 10/771.695 HANKE ET AL. Notice of Allowability Examiner Art Unit ALEXANDER D. KIM. 1656 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed on 09/15/2009. The allowed claim(s) is/are 19,20,22-24 and 38-47. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \( \subseteq \text{Some\* c) \subseteq \text{None of the:} a) $\square$ All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

9. ☐ Other .

Application/Control Number: 10/771,695

Art Unit: 1656

# DETAILED ACTION

# Application Status

 In response to the previous Office action, a Non-Final rejection (mailed on 03/17/2009), Applicants filed a response and amendment received on 09/15/2009.

Claims 1-18, 21, and 25-37 are canceled. Claims 19, 20, 22-24 and 38-47 are pending.

Claims 19, 20, 22-24 and 38-47 are directed to an allowable product in view of the Examiner's amendment as set forth below. Claims 41, 43 and 46, directed to the allowable product because they further limit and depend from a novel and unobvious claims 19 and 24. Claims 41, 43 and 46 encompass a polynucleotide of SEQ ID NO: 20, encoding the polypeptide of SEQ ID NO: 21; wherein the polynucleotide encoding the polypeptide of SEQ ID NO: 21 was previously withdrawn from consideration as a result of a restriction requirement as non-elected invention (i.e., as shown in Group VI, see Restriction/Election mailed out on 3/22/2006).

Since claims 41, 43 and 46 previously withdrawn from consideration under 37 CFR 1.142 have been rejoined (i.e., between Groups IV and VI), the restriction requirement as set forth in the Office action mailed on 3/22/2006 between Groups IV and VI is hereby withdrawn. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to

Art Unit: 1656

provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

## Terminal disclaimer

The terminal disclaimer filed on 09/15/2009 and 12/22/2009 disclaiming the
terminal portion of any patent granted on this application which would extend beyond
the expiration date of US Patent 6,927,046 and US Patent 7,368,276, respectively, have
been reviewed and is accepted on 9/24/2009 and 1/12/2010. The terminal disclaimers
have been recorded.

## Examiner's amendment to the Claims

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment shown below was given in a telephone interview with Duane Stewart III on Dec. 18, 2009 and Dec. 21, 2009.

Amend the claim listing filed on 09/15/2009 with the following changes.

Claim 20. The isolated polynucleotide molecule of claim 19, wherein said nucleotide

Application/Control Number: 10/771,695

Art Unit: 1656

sequence encoding the polypeptide sequence of SEQ ID NO: 19 is SEQ ID NO: 18.

Claim 22: A host cell transformed with the isolated polynucleotide molecule of claim 19.

Claim 23: The host cell of claim 22, wherein said host cell is the cell deposited as NRRL

B30360.

Claim 38. The isolated polynucleotide molecule of claim 20, wherein said nucleotide sequence encoding the polyneptide sequence of SEO ID NO: 2 is SEO ID NO: 1.

Claims 43-47. Replace "said isolated polynucleotide molecule" with --- said vector---.

## Statement of Reasons for Allowance

 Claims 19, 20, 22-24 and 38-47 are allowed. The following is an examiner's statement of reasons for allowance:

The instant invention is drawn to an isolated nucleic acid molecule comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO: 19 (i.e., truncated ORF2) and the polypeptide of SEQ ID NO: 2 (i.e., feedback resistant aspartokinase); and a method of selecting a transformed host cell having the isolated nucleic acid above.

The claimed isolated nucleic acid is novel and unobvious since the naturally occurring threonine amino acid residue 380 in the feedback sensitive form is changed to isoleucine in the ask gene of ATCC 21529 (see instant specification page 4, lines 10-

Application/Control Number: 10/771,695

Art Unit: 1656

14) resulting in the feedback resistant aspartokinase having the amino acid sequence of SEQ ID NO: 2; wherein the claimed nucleic acids, host cell and methods are useful for increasing the production of L-lysine (see page 1, lines 14-15, for example). In view of the examiner's amendment and approval of the terminal disclaimer, all outstanding rejections are withdrawn.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER D. KIM whose telephone number is (571)272-5266. The examiner can normally be reached on 10AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/771,695 Page 6

Art Unit: 1656

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander D Kim/ Examiner, Art Unit 1656

/David J. Steadman/ Primary Examiner, Art Unit 1656